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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

ANTHONY, JOSEPH DAVID

ART UNIT	PAPER NUMBER
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1796

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/803,249	Applicant(s) KENDIG, MARTIN WILLIAM	
	Examiner Joseph D. Anthony	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 43-59, 73 and 85-90 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 43-59, 73 and 85-90 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

FINAL REJECTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 43-59, 73, and 85-90 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Independent claims 43 and 86 clearly contain new matter in the following way:

Applicant's current amendment filed on 1/23/2008, added new matter to independent claim 43, and added new independent claim 86 which also contains new matter in regards to the following: "placing a corrosion inhibitor near the metal substrate". Applicant's said amendment totally confuses the claims in regards to the spatial relationship of the applied corrosion inhibitor to the metal substrate. Furthermore, applicant made no attempt to point out where there is support in the originally filed description for a method of corrosion inhibiting wherein the corrosion inhibitor is placed near the metal substrate instead of *coated* or *adsorbed* onto the metal substrate. The Examiner is also unable to find any support for applicant's said amendment. Dependent claims 44-59, 73, 85 and 87-90 are being rejected here because they are dependent on a rejected base claim.

Finally, the effective filing date for applicant's independent claims 43 and 86, and thus all their dependent claims, is deemed to be 1/23/2008, which is the actual filing date of said amendment that added the new matter.

Specification

The preliminary amendment filed 5/11/2004 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: "The various compositions can be formed as a **film** or absorbed in to a substrate to reduce or inhibit a corrosion of the substrate.", see abstract [emphasis added]. The only mention of "**film**" in the original filed specification was in regards to passive films on the substrate such an oxide film on an aluminum substrate. To use the disclosed oxo-anion compositions in the form of separate distinct film, that can subsequently be contacted with the metal substrate is deemed to be new matter.

Applicant is required to cancel the new matter in the reply to this Office Action.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 43-59, 73 and 85-90 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Independent claims 43 and 86 are deemed to be very indefinite in the

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following ways: Applicant's amendment filed on 1/23/2008 amending independent claim 43, and adding independent claim 86 to contain the limitation of: "placing a corrosion inhibitor near the metal substrate", totally confuses the claims in regards to the spatial relationship of the applied corrosion inhibitor to the metal substrate. Applicant's originally filed description for a method of corrosion inhibiting of a metal surface discloses the corrosion inhibitor being *coated* or *adsorbed* onto the metal substrate.

Dependent claims 44-59, 73, 85 and 87-90 are being rejected here because they are dependent on a rejected base claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical

Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 43-59, 73 and 85-90 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Kendig U.S. Patent Number 6,716,370.

Kendig teaches corrosion inhibitor is described which includes several supramolecular oxo-anion compositions useful for preventing the propagation of pit corrosion on aluminum and aluminum alloys. The oxo-anion compositions preferably include soluble polymeric oxidic acids comprising combinations of molybdenum, phosphorous, tungsten, and silicon. These compositions are useful as corrosion inhibitors in high-moisture, corrosive environments, such as radiators and cooling systems. For low-moisture environments, these oxo-anion compositions can be reacted with a counter-ion, such as various metals, including, but not limited to the rare earth metals, to form a soluble salt. The salt can then be adsorbed onto a carrier, such as paint pigments, which can then be applied to the surfaces of aluminum and aluminum alloys. These surface adsorbents then become sparingly soluble and are gradually released over time in the presence of an aqueous corrosive agent so as to prevent propagation of pit corrosion, see abstract, figures and claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 43-59, 73 and 85-90 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tomlinson U.S. Patent Number 5,759,244 or Tomlinson U.S. Patent Number 5,964,928 or Ahearn, Jr. et al. U.S. Patent Number 5,205,922 or Verma et al. U.S. Patent Number 6,024,892 or Verma U.S. Patent Number 6,503,420 or Dolan U.S. Patent Number 5,449,415 or McCormick et al. U.S. Patent Number 6,261,622 or Minevski et al. U.S. Patent Number 6,500,276.

Tomlinson '244 teaches an aqueous acidic composition for providing improved corrosion resistance and improved paint adhesive to metals; e.g., ferrous, aluminum, or magnesium alloys; upon contact. The composition comprises a Group IV-A metal such as zirconium in an acidic solution with one or more oxyanions to stabilize and solubilize the metal while fluorides and organic solvents are specifically excluded from the composition. The coating is at a pH below about 5.0 and is preferably in a range between about 1.0 and about 4.0. The coating may contain surfactants, sequestering agents, or organic additives for improved corrosion protection and paint adhesion. The substrate may be treated by immersion, spray, fogging or rollcoat, see abstract.

Tomlinson '244 directly discloses that: "To adjust the pH to lower levels, it is preferred to

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use the corresponding acid of the oxyanion, . . . ”, see column 5, lines 12-23. Applicant's claims are thus deemed to be directly anticipated when a composition is made that includes the oxyanion and its corresponding acid.

Tomlinson '928 has a very similar disclosure as Tomlinson '244, see abstract and Column 13, lines 35-45 and column 14, lines 29-31 of the '928 patent. Applicant's claims are thus deemed to be anticipated over the patent when a composition is made that includes the oxyanion and its corresponding acid.

Ahearn, Jr. et al. teaches the use of solutions of sodium titrate and sodium molybdate as effective corrosion inhibitors for preventing pitting on anodized aluminum surfaces. The solutions can be used within an acidic pH, and such an acidic pH would cause the oxo-anion to be in equilibrium with its corresponding acid, see claim 2. Applicant's claims are deemed to be anticipated over the reference.

The two Verma references both teach anticorrosion solutions for dehumidification systems. The solutions contain in part heteropoly complex of transition metal oxo-anions, see column 3, line 13 to column 5, line 17 of the '892 patent. The anticorrosion solutions clearly disclose the acid form of oxo-anions as well as the non-acid form of oxo-anions. Applicant's claims are deemed to be anticipated over the references.

Dolan and McCormic et al both teach anticorrosion compositions to treat metal surfaces. These compositions contain in part fluorine containing anions which may be oxo-anions and phosphorous containing inorganic oxyanions, see the abstracts and column 2, lines 15-60 and column 3, line 5 to column 4, line 19 of the '622 patent. The compositions are used within an acidic pH, and such an acidic pH would cause the oxo-

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anion to be in equilibrium with its corresponding acid, see abstracts. Applicant's claims are thus deemed to be anticipated over the references.

Minevski et al teach polymetalate and hetropolymetalate conversion coatings of metal surfaces, see abstract. The compositions are used within an acidic pH, and such an acidic pH would cause the oxo-anion to be in equilibrium with its corresponding acid, Applicant's claims are deemed to be anticipated over the reference.

In the alternative, applicant's claims may differ from all said above Patents in that there may not be a direct teaching (i.e. by way of a specific example) to corrosion inhibiting compositions that actually comprise an oxyanion and its corresponding acid. It would have been obvious to one having ordinary skill in the art to use the direct disclosures of each individual Patent as strong motivation to make corrosion inhibiting compositions that actually comprised an oxyanion and its corresponding acid.

Response to Arguments

Applicant's arguments filed 1/23/08 with the amendment have been fully considered but are not persuasive to put the application in condition for allowance for the reasons set forth above. Additional Examiner comments are set forth next. In light of the fact that applicant's amendment filed 1/23/2008 has caused the effective filing date of applicant's claims to be the same as said amendment, namely 1/23/08, applicant's parent application now U.S. Patent Number 6,716,370 is deemed to be prior-art over applicant's pending claims. The Examiner is maintaining the new matter objection to applicant's specification

since the limitation of: "The various compositions can be formed as a film or absorbed in to a substrate to reduce or inhibit a corrosion of the substrate.", as made to the abstract in the amendment filed 5/11/2004 has not been effectively rebutted in applicant's *Remarks* because applicant's citation of paragraphs 38 and 51, fail to provide actual support for a "film". The only mention of "film" in the original filed specification was in regards to passive films on the substrate such an oxide film on an aluminum substrate. Applicant's arguments against the previous applied prior-art references to: Tomlinson U.S. Patent Number 5,759,244 or Tomlinson U.S. Patent Number 5,964,928 or Ahearn, Jr. et al. U.S. Patent Number 5,205,922 or Verma et al. U.S. Patent Number 6,024,892 or Verma U.S. Patent Number 6,503,420 or Dolan U.S. Patent Number 5,449,415 or McCormick et al. U.S. Patent Number 6,261,622 or Minevski et al. U.S. Patent Number 6,500,276, are deemed to be answered by the Examiner in the main body of each rejection as set forth above. Finally, the Examiner has dropped the previously made prior-art rejections over: De Pue et al. Floyd, Jr. et al. and Bradley et al..

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Examiner Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Joseph D. Anthony whose telephone number is (571) 272-1117. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (571) 272-1498. The centralized FAX machine number is (571) 273-8300. All other papers received by FAX will be treated as Official communications and cannot be immediately handled by the Examiner.

/Joseph D. Anthony/
Primary Examiner, Art Unit 1796
5/9/08